

Biomass Research and Development Initiative
Technology Transfer and Education Programs for the Southern U.S.: Interface Fuels for Bioenergy
Technical Summary

The goal of this biomass training program is to encourage the use of woody biomass for bioenergy production in communities at the wildland-urban interface in the thirteen southern states and Puerto Rico. The overall objectives of this project are to: 1) increase awareness and knowledge about using woody biomass for energy production; 2) enable community leaders, potential woody fuel users, biomass suppliers, and forest managers to discuss the possibilities in their region; 3) provide tools and resources as communities begin to plan for new opportunities.

This project will establish a “Wood to Energy” training program to link those communities with nearby biomass supplies with potential woody fuel users to increase the likelihood that more woody biomass will be used to generate power in southern communities. Since a great deal of woody biomass is produced by the urban forest and development activities, we are not focusing exclusively on forest management as the source of biomass. The materials and resources will be produced specifically for this project by a team of regional experts. This program will gather information and experience from various fields—economics, psychology, forestry, engineering, and education—to generate the materials and design a program that will achieve results. This program will include:

- needs assessment
- state-of-the-science synthesis that will be published as a USDA Forest Service General Technical Report (GTR)
- economic analysis of 14 communities in the South and Puerto Rico
- case studies of existing bioenergy production facilities
- curriculum manual and program materials
- training of trainers workshops
- community workshop series
- online community support website and satellite forums

Throughout the project we will have mechanisms in place to monitor and evaluate the content and process. The GTR will be peer-reviewed. An advisory council, consisting of potential woody biomass users, biomass specialists, state forestry agencies, extension, and others will be established to guide project development and provide expert review of project tools and materials. The project will weave evaluation elements throughout the three years of activities, helping to ensure that the materials are accurate and useful, that the training program is attracting the right participants and providing helpful materials, and that participants are supported in their efforts to develop biomass energy systems.

Numerous anticipated benefits will result from the project. The audience for these training materials and activities will learn that utilizing woody biomass for bioenergy production can contribute to ecological and economic sustainability as well as community well being. With increased knowledge and skills, land managers and community developers can expand their management options to include removal of hazardous small diameter material, reducing the risk of wildfire and increasing the health of forest stands. Several communities across the South, such as Gainesville, FL and New Bern, NC have already demonstrated the rural economic and environmental benefits of using bioenergy as an alternative to fossil fuels, including retained income in the local community, cleaner air, maintenance of green space, reduced waste disposal costs, and much more. This project will support the DOE/USDA Biomass Research and Development Initiative as well as the agencies’ efforts to promote the commercialization of biomass, encourage greater innovation, and increase development of biomass-based products.

This project will utilize the existing capacity of the USDA Forest Service, Southern Research Station, the University of Florida, the Southern Region Cooperative Extension Service, and the Southern States Biobased Alliance of the Southern States Energy Board.